CLAIMS

1 A battery residual quantity display method in an electronic equipment comprising: an equipment body within which a microcomputer having communication function is mounted; and a battery pack detachably loaded at the equipment body and adapted so that a microcomputer having communication function to perform serial communication to and from the microcomputer of the equipment body is mounted, the battery pack serving to supply power to the equipment body,

wherein when power is turned ON, the microcomputer of the equipment body side serves to first acquire, by serial communication, information for battery residual quantity display from the microcomputer of the battery pack side loaded at the equipment body to perform battery residual quantity display on the basis of the acquired information,

the microcomputer of the equipment body side serves to then acquire, by serial communication, information for authentication processing from the microcomputer of the battery pack side loaded at the equipment body to perform authentication processing to judge on the basis of the acquired information as to whether or not the battery pack connected to the equipment body is genuine battery pack, and

the microcomputer of the equipment body side serves to update, after the authentication processing, the content of battery residual quantity display

on the basis of information for battery residual quantity display, which is acquired by serial communication from the microcomputer of the battery pack side.

2 The battery residual quantity display method according to claim 1,

wherein the microcomputer of the battery pack side detects a current flowing out from the battery pack as information for the battery residual quantity display to integrate current quantities thereof to thereby grasp a current quantity of the battery usable at present, and

the microcomputer of the equipment body side serves to acquire, by serial communication, current quantity of the battery usable at present as information for the battery residual quantity display from the microcomputer of the battery pack side loaded at the equipment body to calculate remaining usable time of the battery on the basis of the acquired current quantity of the battery usable at present and current consumption value of the equipment to perform battery residual quantity display.

3 The battery residual quantity display method according to claim 1,

wherein the microcomputer of the equipment body side and the microcomputer of the battery pack side have common certain information, and

the microcomputer of the equipment body side receives the common information by serial communication from the microcomputer of the battery pack side loaded at the equipment body to compare the received

information with information that the microcomputer of the equipment body side itself has to thereby perform an authentication processing to judge the battery pack as to whether or not it is a genuine battery pack.

4 The battery residual quantity display method according to claim 1,

wherein in the case where the microcomputer of the equipment body side judges that the battery pack loaded at the equipment body is not the genuine battery pack by the authentication processing, it displays a notification thereof thereafter to cut off power supply of the equipment body.

5 The battery residual quantity display method according to claim 1,

wherein, in performing the authentication processing, the microcomputer of the equipment body side alternately receives information for the authentication processing and information for the battery residual quantity display from the microcomputer of the battery pack side loaded at the equipment body to update, after the authentication processing, the content of battery residual quantity display on the basis of the information for battery residual quantity display which has been acquired by serial communication from the microcomputer of the battery pack side.

6 The battery residual quantity display method according to claim 1,

wherein the microcomputer of the equipment body side stores, in advance, result of the authentication processing to use the result of the authentication processing in authentication processing at the second time

when power is turned ON and times subsequent thereto.

7 An electronic equipment comprising:

an equipment body within which a microcomputer having communication function is mounted; and

a battery pack detachably loaded at the equipment body and adapted so that a microcomputer having communication function to perform serial communication to and from the microcomputer of the equipment body side is mounted, the battery pack serving to supply power to the equipment body,

wherein when power is turned ON, the microcomputer of the equipment body side serves to first acquire, by serial communication, information for battery residual quantity display from the microcomputer of the battery pack side loaded at the equipment body to perform battery residual quantity display on the basis of the acquired information,

the microcomputer of the equipment body side serves to then acquire, by serial communication, information for authentication processing from the microcomputer of the battery pack side loaded at the equipment body to judge on the basis of the acquired information as to whether or not the battery pack connected to the equipment body is genuine battery pack, and

the microcomputer of the equipment body side serves to update, after the authentication processing, the content of battery residual quantity display on the basis of the information for battery residual quantity display, which is

acquired, by serial communication, from the microcomputer of the battery pack side.